

XXXII.—*Further Notes on the Birds of the Island of Formosa.*

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(Plates XIII. & XIV.)

In January 1912, Mr. Walter Goodfellow paid a second visit to the highlands of Formosa, his principal object being to obtain living examples of the splendid Mikado Pheasant. With this end in view he formed two camps on Mount Arizan, one at about 7000 ft., and a second about 14 miles to the north at about 8000 ft. His mission has proved highly successful, for, after many difficulties, he succeeded in catching, with the aid of the savages, thirteen living Pheasants. Two of these were accidentally killed by the falling branch of a tree, but the remaining eleven, eight males and three females, were brought safely to England and are still in perfect health. Among the collection of skins brought home there were a few pairs of the Pheasant; likewise examples of many interesting forms peculiar to Formosa: two of these, a Bullfinch and a Bush-Robin, are now described for the first time*.

The discovery of a second species of *Pyrhula* and a second species of *Ianthia*, both inhabiting the same ground as *P. owstoni* and *I. johnstoniae*, is specially noteworthy.

The present collection also contained examples of four new species and subspecies which have already been described [cf. Bull. B. O. C. xxix. pp. 107–109 (1912)], viz., *Parus ater ptilosus*, *Horeites acanthioides concolor*, *Brachypteryx goodfellowi*, and *Dicaeum formosum*. The discovery of a Flower-pecker in Formosa adds a new family to the fauna, to which Mr. Goodfellow has added no fewer than sixteen new species, most of them being remarkably distinct forms.

* Cf. Ibis, 1907, pp. 151–279, pls. iii. & iv.; 1908, pp. 600–608, pls. xii. & xiii.

CARPODACUS FORMOSANUS.

Carpodacus incertus Ogilvie-Grant (nec Risso), Bull. B. O. C. xvi. p. 122 (1906); Ogilvie-Grant & La Touche, Ibis, 1907, p. 161; 1908, p. 601; Rothschild, Bull. B. O. C. xxi. p. 9 (1907).

Carpodacus formosanus Ogilvie-Grant, Bull. B. O. C. xxvii. p. 51 (1911).

A fine series of this Rose-Finch was procured on Mount Arizan between January and March, including adult males and females and immature males.

The British Museum has also received examples of this Finch obtained on Arizan in the month of August and presented by Mr. A. E. Wileman. I quite agree with Mr. Rothschild that the male most nearly resembles that of *C. vinaceus* from Western China, but is easily distinguished by its larger size, wing 81 mm. as compared with 73 mm.; the darker purplish-lake coloured abdomen; and the whiter and less rosy superciliary streaks.

PYRRHULA OWSTONI.

Pyrrhula owstoni Rothsch. & Hart, Bull. B. O. C. xxi. p. 9 (1907).

Mr. Goodfellow obtained two males of this interesting species of Bullfinch on Arizan at 7000 and 8000 ft. in February and March. Two females killed on Arizan, 7200 ft., on the 15th August, 1908, had previously been presented to the National Collection by Mr. A. E. Wileman. The sexes are alike in plumage with the exception of the outer margin of the short innermost secondary, which is dull crimson in the male and cream-colour in the female. In addition to this species Mr. Goodfellow was fortunate enough to discover a second species allied to *P. erithacus*, which is described below.

PYRRHULA ARIZANICA, sp. n.

Adult? male. Most nearly allied to *P. erithacus* Blyth, from Sikkim, of which it is no doubt the representative form in Formosa. The specimen is probably not fully adult, only the sides of the breast being partially reddish-orange. It

differs in having the black on the forehead wider, not bordered posteriorly by a distinct whitish band; the outer web of the innermost secondary purplish-black like the longer feathers, and the rest of the crown and back of a more slate-grey. Iris brown; bill black, slate-coloured at the base; feet brownish-flesh-colour. Wing 84 mm.

Adult female. Much like the female of *P. erithacus*, but the white bar bordering the black forehead posteriorly is nearly obsolete, whereas in the latter it is strongly marked; the back is greyer and the general colour of the breast smoky-brown, rather than vinaceous-brown; the outer web of the innermost secondary has a pale brownish-white patch next the shaft. Iris brown; bill black; feet brownish. Wing 83 mm.

Mr. Goodfellow has supplied the following note regarding the discovery of this species:—

“This Bullfinch was obtained in the same locality as *P. owstoni*, with which it probably associates. During January, February, and March, Bullfinches were observed in small parties of from eight to a dozen always in the tops of the lofty cypress trees, and generally out of shot. The number collected, therefore, was small, and the tops of the trees being often more or less obscured in fog added to the difficulty of obtaining specimens. A few were lost in the thick undergrowth or fell down inaccessible places. Speaking of Bullfinches generally, I should not call them rare on Arizan, and I have reason to believe they were more numerous a little lower down than my second camp and on the other side of the mountain. It is probable that during other seasons, when berries are ripe on the lower trees and bushes, they are much easier to shoot. Only once did I hear their call, which is exactly like that of our home bird. During my first expedition to Formosa in 1906, I never met with a Bullfinch on Mt. Morrison, and, after seeing the kind of forest they inhabit, I doubt much if they are to be found in any of the parts I visited, although, judging from the habits of our English species, that country seemed more suitable for them than Arizan.”

SITTA SINENSIS.

Sitta sinensis Verr. ; Ogilvie-Grant & La Touche, *Ibis*, 1907, p. 167 ; *Ibis*, 1908, p. 602.

Several additional specimens of the Nuthatch from Arizau, &c., have now been examined, and appear to be indistinguishable from Chinese examples.

REGULUS GOODFELLOWI.

Regulus goodfellowi Ogilvie-Grant ; Ogilvie-Grant & La Touche, *Ibis*, 1907, p. 167, pl. iii.

This lovely Fire-crested Wren was fairly common on Arizau at 8000–9000 ft. in February and March, and Mr. Goodfellow procured about a dozen examples of both sexes which do not differ in any way from the typical pair obtained on Mount Morrison at 9000–10,000 ft. in January 1906. It was occasionally met with travelling through the forest in company with flocks of *Parus ater ptilosus* and other species of small forest birds.

PARUS ATER PTILOSUS. (Pl. XIII. fig. 2.)

Parus ater ptilosus Ogilvie-Grant, *Bull. B. O. C.* xxix. p. 108 (1912).

This very interesting crested form of the Coal-Titmouse has been described as follows :—

Adult male and female. Near *Parus ater insularis* Hellmayr, but distinguished by having the median black feathers of the occiput considerably lengthened (about 19 mm.), extending conspicuously beyond the other feathers and forming a marked crest. Iris brown ; bill black ; feet slate-colour.

Male. Wing 61 mm. ; tail 43 ; tarsus 17.

Female. „ 57 „ ; „ 40 ; „ 16.

Mr. Goodfellow has kindly supplied me with the following notes regarding this crested Coal-Titmouse :—

“This species was not uncommon at 8000 ft., and was usually observed in company with other small birds. After hours had passed without the song of a bird being heard, a large mixed flock of small birds would suddenly appear, temporarily animating the gloomy forests with their presence.



Red-breasted Nuthatch

Crested Flycatcher

SITTA PYGMAEA
TIJUANCOEDUS FULVIFRONS

When their course was downwards they resembled nothing so much as a shower of leaves blown from one tree to another. The species mostly congregating together were *Yuhina brunneiceps*, *Alcippe morrisonia*, *Ægithalus concinnus*, and *Parus insperatus*, the first-named being by far the most numerous and the most charming in all its habits. *P. ater ptilosus* was among the least numerous, and occasionally the party included examples of the lovely Fire-crest, *Regulus goodfellowi*. I always remarked that the flocks were either led or followed by some larger species, usually *Actinodura morrisoniana*, but sometimes *Malacias auricularis*.

“These Coal-Titmice were nesting early in April, and I saw one close to the summit of the mountain, at an elevation of 9000 ft., carrying a grub to a nest in a cypress tree. The crest is at all times conspicuous.”

— HOREITES ACANTHIZOIDES CONCOLOR.

Horeites acanthizoides concolor Ogilvie-Grant, Bull. B. O. C. xxix. p. 107 (1912).

This small Bush-Warbler differs from *H. brunescens* (Hume) from India in having the breast and belly darker; while from *H. acanthizoides* (Verr.) from China it is distinguished by having those parts much less yellow. It has been described as follows:—

Adult male and female. General colour above (including the wings and tail) brownish-olive, inclining to rufous on the top of the head, nape and mantle, but especially on the outer webs of the secondary quills; rump washed with yellowish-olive; a blackish patch in front of the eye, above it a pale yellowish-white streak, commencing on the lores and passing over the eye to the occiput: chin, throat, and chest white, tinged with buff, shading into dull yellowish-buff on the head and rest of the under parts. Iris brown; bill brown, creamy-yellow at the base; feet dull yellow.

Male. Total length about 100 mm.; wing 51; tail 47; tarsus 22.

Female. Total length about 100 mm. ; wing 49 ; tail 44 : tarsus 19.

Mr. Goodfellow remarks :—“This was another species which appeared on Arizan simultaneously with *Brachypteryx goodfellowi*. During my stay there it was quite solitary in its habits. At first one might be heard around the camp once in two or three days, and latterly a little oftener. It also frequented the bamboo-scrub, but was not averse to shewing itself like *Brachypteryx* : in fact, it seemed quite a quizzical little creature, and often came within a few feet of the entrance to the camp. With tail cocked straight up and head bent low, it scolded us in a voice like the sound made by a Cicada. Needless to say, with such habits it was difficult to shoot cleanly, and it was necessary to wait until the bird retired to thicker cover so that there was something to break the force of the shot. Its insect-like notes appeals strongly to the musical ear of the Japanese. The species was found right up to the summit of the mountain.”

IANTHIA JOHNSTONIÆ.

Ianthia johnstoniæ Ogilvie - Grant ; Ogilvie-Grant & La Touche, Ibis, 1907, p. 175, pl. iv.

Mr. Goodfellow procured a fine series of adult males of this remarkable Bush-Robin, but only two or three females.

Among the specimens from Arizan presented to the Museum by Mr. A. E. Wilman, and collected in August, there are three immature examples of both sexes. These are of special interest, as they prove that the male bird assumes his chestnut-maroon and black plumage as soon as he moults out of the spotted nestling plumage. This, as shown by two males before me, is brown with pale sandy-buff shaft-streaks dilated towards the tip. The young female has similarly marked nestling feathers.

The discovery of another extremely distinct new species of *Ianthia* in the same locality as *I. johnstoniæ* is very remarkable, and its description is given below.



† *IANTHIA GOODFELLOWI*, sp. n. (Pl. XIV.)

Adult male. Crown and nape dull olive; lores and ear-coverts blackish, sometimes washed with blackish-slate; a wide white superciliary band commencing above the lores and extending to the occiput; upper parts dark slate-grey; chin and throat pale buff; chest and breast darker buff tinged with olive, especially on the sides of the body, flanks, and *under tail-coverts*; middle of the lower breast and belly white; wings dark slate-black, except the outer webs of the primaries and the outer wing-coverts, which are edged with rufous-olive; tail dark slate-black. Iris brown; bill black; feet brown. Total length 140 mm.; wing 76; tail 63; tarsus 30.

Adult female. Much like the female of *I. johnstoniae*, which it resembles on the upper surface; but the tail is brown washed with olive instead of blackish, the chest and breast are brighter and of a more buff-colour, and the under tail-coverts are buff instead of pure white. This last character, as well as the colour of the tail, serve to distinguish the females of the two species at a glance*. Wing 71 mm.; tail 55; tarsus 30.

Mr. Goodfellow has supplied me with the following field-notes on these two species of *Ianthia*. Both were found together, and he was at one time under the impression that the males of *I. goodfellowi* represented the immature male plumage of *I. johnstoniae*.

“Both species of *Ianthia* are almost entirely ground-birds frequenting the forest trails and fallen tree-trunks, and are of solitary habits. Not until the latter part of March did I see two of these birds together, when they were beginning to nest. They seem to have the same pugnacious character as our English Robin. Two cocks of *I. johnstoniae* allowed me to approach within a yard of them when engaged in battle, and judging by the amount of feathers they left behind, one or both must have been severely punished. Although both

* In the plate of *I. johnstoniae* this character of the white under tail-coverts has been lost sight of, though it is mentioned in the description.

sexes seem to prefer the more open parts of the scrub, the male was far more often seen than the female. The call is melodious, but hardly sustained long enough to be described as a song. When once heard it is easily recognised again, even at a long distance. I often came across them searching for insects in damp rocky places."

PHOEPHYGA FORMOSANA.

Phoëpyga formosana Ingram, Bull. B. O. C. xxiii. p. 97 (1909).

Mr. Goodfellow was fortunate in securing a small series of this interesting Hill-Wren on Mount Arizan, between 7000 & 8000 ft., in the month of March. The type-specimen, which was presented to the British Museum by Mr. Collingwood Ingram, was obtained in February 1909. There are also three specimens from the same locality in the Tring Museum procured by Alan Owston's collectors.

PROPARUS FORMOSANUS.

Proparus formosanus Ogilvie-Grant; Ogilvie-Grant & La Touche, Ibis, 1907, p. 181; 1908, p. 603.

This Tit-Babbler was discovered by Mr. Goodfellow during his expedition to Mount Morrison, when a single specimen was obtained at 9000 ft. in January 1906. On Arizan he found this species comparatively common at 7000-8000 ft. Among those procured there is a curious partially-white specimen, the forehead and a patch of feathers on the nape being white, and bill and legs pale pink instead of brown. Mr. A. E. Wilman's collection of Arizan birds includes a male shot on the 8th of August, 1908; it does not appear to differ much in plumage from birds killed in February and March, being only a trifle paler.

ACTINODURA MORRISONIANA.

Actinodura morrisoniana Ogilvie-Grant; Ogilvie-Grant & La Touche, Ibis, 1907, p. 185; 1908, p. 604, pl. xii. fig. 2.

Mr. Goodfellow's collection from Arizan includes a large series of both sexes of this handsome *Actinodura* obtained between January and March, but the plumage is alike in all of them.

Among the birds from Arizan presented by Mr. A. E. Wileman there are three pairs killed between the 7th and 15th of August. In two pairs of these the quills of the wing and tail are in full moult; in the third pair the moult has not yet commenced. The plumage of all six does not differ appreciably from that of the series killed in the early part of the year.

SUTHORA MORRISONIANA.

Suthora morrisoniana Ogilvie-Grant; Ogilvie-Grant & La Touche, Ibis, 1907, p. 188; 1908, p. 604, pl. xii. fig. 1.

Mr. Goodfellow procured a second specimen—a female—of this very distinct Crow-Tit, which he killed on Arizan at 8000 ft. in March. There are also three specimens in Mr. Wileman's Collection—a male and two females—likewise killed on Arizan, 7200 ft., on the 7th August, 1908. The specimens collected in August seem to differ slightly from those obtained in January (♂ type) and March in having the sides of the breast and flanks duller and less orange.

BRACHYPTERYX GOODFELLOWI.

Brachypteryx goodfellowi Ogilvie-Grant, Bull. B. O. C. xxix. p. 108 (1912).

This interesting species of Short-wing was obtained by Mr. Goodfellow for the first time during his recent expedition to Arizan, at elevations of from 7000 to 8000 ft. It has been described as follows:—

Adult male and female. Very similar to the *female* of *B. cruralis* (Blyth), but the forehead, lores, and feathers round the eye are olive-brown like the rest of the crown, instead of rust-red; the general colour of the upper parts is dark olive-brown, and the tail is darker with hardly a trace of rufous. The concealed white eyebrow-stripe is well developed, extending from above the lores to the occiput. The under parts are of a rather more olive-brown, and the middle of the breast and belly more distinctly white. Iris brown; bill black; feet brown.

Male. Total length ca. 140 mm.; wing 66; tail 50; tarsus 21.

Female. Total length ca. 140 mm.; wing 62; tail 46; tarsus 19.

The Chinese species, *B. carolinæ* La Touche [*cf.* Bull. B. O. C. viii. p. ix (1898)], also has the plumage of the sexes similar or very nearly so, but it is a much smaller and more brightly-coloured bird, with the middle of the breast and belly white.

Mr. Goodfellow has supplied me with the following note about the finding of this species :—

"This Short-wing was neither seen nor heard before the end of February or early March. It required a great deal of looking for and the exercise of much patience, owing to its habit of concealing itself low down in the thick bamboo-scrub which forms the chief undergrowth in the cypress forests. It was some time after the first specimens were obtained that I was able with certainty to identify this species with a beautiful song which had puzzled me much for some time. Even after I had entirely satisfied myself, doubts existed for some time longer among the Japanese in my camp as to whether the *Brachypteryx* was really the songster. The call-notes of both sexes are full and rich, but the song of the male is well sustained and has a surprising variety of notes; it was heard at almost all hours of the day up to dark. Even the Japanese, whose ideas of music are so very different from ours, waxed quite enthusiastic over it.

"It seems as if this species must either go to the southern end of the island or much lower down the mountains during the extreme winter months, for it is a fact that after February there was quite a sudden influx of them. When returning to the coast, early in April, they appeared to be even more numerous just below the little Government settlement at 6000 ft. than they had been around my camp. Here, for a short time on the march, their song was heard on all sides.

"Although the bird was not rare, it was very difficult to shoot owing to its retiring habits. I have often waited half-an-hour to get a shot at one which had been calling

in the bush all around me without once shewing itself. Firing at such close quarters often resulted in a bird too damaged to preserve, and the skin is, moreover, very tender."

† *DICÆUM FORMOSUM*. (Pl. XIII. fig. 1.)

Dicæum formosum Ogilvie-Grant, Bull. B. O. C. xxix. p. 109 (1912).

Dicæum sp., Uchida, Hand-l. Formosan Birds, Annot. Zool. Jap. viii. pt. i. p. 203 (1912).

This handsome little Flower-pecker is represented in Mr. Goodfellow's collection by a single specimen, a male procured on Arizan, 7000 ft., in March. It has been described as follows:—

Adult male. Most nearly allied to *D. luzoniense* O.-Grant, but the scarlet on the chest does not extend on to the breast, the sides of the breast and belly are pale brownish-buff, the flanks are paler olive, and the under tail-coverts pale buff, instead of light cinnamon-yellow. Wing 50 mm.

The head of this specimen has unfortunately been somewhat damaged, but the checks are no doubt of a much darker grey than in *D. luzoniense*. A second complete example of this species (sex not recorded) was obtained by Mr. H. J. Elwes in the Arizan district, at about 6000 ft., during his recent visit to Formosa. He has kindly presented this specimen to the Natural History Museum.

The two females mentioned by Mr. S. Uchida (*op. cit.*) are no doubt referable to *D. formosum*.

Mr. Goodfellow remarks:—"This Flower-pecker is evidently rare. The single specimen obtained was shot by one of the savages who was with me. He and others to whom I shewed it did not appear to recognise it."

† *NUCIFRAGA OWSTONI*.

Nucifraga owstoni Ingram, Bull. B. O. C. xxv. p. 86 (1910).

At my request Mr. Goodfellow procured a series of specimens of this Nutcracker, which bear out the characters given by Mr. Ingram. The size of the white spots on the breast